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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,593

06/13/2007

Peter Daute

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EXAMINER

WEISS, PAMELA HL

ART UNIT

PAPER NUMBER

1771

NOTIFICATION DATE

DELIVERY MODE

08/25/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/590,593

Applicant(s)

DAUTE, PETER

Examiner

PAMELA HL WEISS

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/19/2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-5,7-12,14-19 and 21-26 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-5,7-12,14-19 and 21-26 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-943)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

1. Applicant has submitted amended claims and Remarks dated 7/19/2011. The amendments to the claims do not overcome the prior rejection. The Remarks are unpersuasive for the reasons below set forth.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schnur et al. (US 2003/0096713).

Regarding Claims 1-3:

Schnur discloses a lubricating composition comprising a major amount of an oil of lubricating viscosity with an iodine number less than about 4 [0011] comprising a

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natural and/or synthetic oil and mixtures thereof including esters of dicarboxylic acids and polyols [0011]. The natural oils include animal oil [0011]. While Schnur does not expressly disclose a mixture of both a natural and synthetic oil, since Schnur teaches mixtures of oils used for the same purpose and discloses both of the claimed oils, it would have been obvious to one of ordinary skill in the art to use both. “It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art.” *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

The intended use of the composition for thermoplastic processing does not further limit the claim as it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). As such, the use of the composition for thermoplastics is not further limiting to the composition.

The claim language “consisting essentially of” does not preclude the present of other additive components. See MPEP 2111.03.

Absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, “consisting essentially of” will be construed as equivalent to “comprising.” See, e.g., *PPG*, 156 F.3d at 1355, 48 USPQ2d at 1355

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(“PPG could have defined the scope of the phrase consisting essentially of” for purposes of its patent by making clear in its specification what it regarded as constituting a material change in the basic and novel characteristics of the invention.”). See also *AK Steel Corp. v. Sollac*, 344 F.3d 1234, 1240-41, 68 USPQ2d 1280, 1283-84 (Fed. Cir. 2003) (Applicant’s statement in the specification that “silicon contents in the coating metal should not exceed about 0.5% by weight” along with a discussion of the deleterious effects of silicon provided basis to conclude that silicon in excess of 0.5% by weight would materially alter the basic and novel properties of the invention. Thus, “consisting essentially of” as recited in the preamble was interpreted to permit no more than 0.5% by weight of silicon in the aluminum coating.); *In re Janakirama-Rao*, 317 F.2d 951, 954, 137 USPQ 893, 895-96 (CCPA 1963).

5. Claims 1-5, 8, and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Worschech et al. (US 3,875,069) (referred to as ‘069) in view of Worschech et al. (4,637,887) (referred to as ‘887)

Regarding Claims 1-3:

Worschech et al. ‘069 discloses a lubricant composition for thermoplastic processing comprising (Abstract):

a) at least one natural fat and oil ‘069 discloses the natural fats and oils such as olive oil, rapeseed oil, coconut oil, palm oil, soybean oil, cottonseed oil and linseed oil are hydrogenated (C7 L37-45) ‘069 discloses cottonseed oil as a component (C8 L42-44). (*‘069 C8 L35-45: hydrogenated cotton seed oil which will intrinsically possess an iodine number overlapping the claimed ranges and meeting the limitation for a first*

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component consisting of a natural fat and/or oil with an iodine value below 10. Noting that in the applicant's specification p5 L26-P6 L10 indicates that cottonseed oil is a suitable natural fat or oil which may be hydrogenated to achieve the claimed iodine values). See MPEP 2144.05(I): "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976)".

Worschech also discloses the natural oil may be hardened castor oil (C8 L43-47)

b) at least one lubricant different from the natural fat and/or oil of component (a).
(‘069 C3 L1-22 mixed esters *meeting the limitation for a second component*)

Worschech et al. ‘069 discloses the saturation of the long chained mono carboxylic acids affect the physical consistency of the product at room temperature and discloses that a mono carboxylic acid component saturated aliphatic mono carboxylic acid is solid while unsaturated are oil liquids at room temperature. (‘069 C6 L31-51).

Worschech et al. ‘069 also discloses the lubricant component (b) is selected from the group of fatty acid esters of fatty alcohols, di carboxylic acid esters of fatty alcohols and polyol fatty acid esters. (C3 L1-21) and (C6 L61-65)

Worschech et al. ‘069 et al. does not expressly disclose the iodine value below 10, or below 8, or between 0.1 and 5.

Worschech et al. ‘887 discloses a lubricant for a vinyl chloride polymer which contains triglycerides containing hydroxy fatty acid residues of natural fats and oils such as olive oil, linseed oil, palm oil, lard oil, herring oil, soybean oil, tallow and rapeseed oil and preferably their mixtures. (‘887 C1 L65-C2 L2). Worschech et al. discloses the

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natural oils are selectively hydrogenated by first epoxidizing them and then hydrogenating them to open the epoxy rings. (C2 L4-22) Worschech et al. also discloses the use of a hydroxyl fatty acid residue formed from rapeseed oil as it has an iodine number less than or equal to 5. Worschech et al. discloses hydrogenated rapeseed oil, soybean oil and tallow all having iodine numbers less than or equal to 5 (C3 L65-C4 L12).

Worschech '887 discloses the availability of natural castor oil and hardened castor oil is subject to fluctuation and a substitute is needed (C1 L30-42). Worschech '887 compares the hydrogenated oils to hardened castor oil and shows they may substitute for natural castor oil or hardened castor oil (C4). Worschech '887 discloses that its composition is suitable for thermoplastic molding. (C3 L45-47).

It would have been obvious to a person having ordinary skill in the art at the time of invention to use *the rapeseed oil, tallow, and soybean* composition of Worschech et al. '887 having an *iodine number of less than or equal to 5* in place of the natural or hardened castor oil of Worschech '069 as it is a suitable substitute for castor oil, is suitable for use in thermoplastic lubricants and is not in short supply.

Worschech also discloses the method for processing thermoplastics comprising the steps of incorporating into a thermoplastic polymer a lubricant composition comprising: (a) at least one natural fats or oils with iodine values below 10 and at least one lubricant different from the natural fat and/or oil of component (a) ('069 C3 L1-22 mixed esters) and processing the thermoplastic polymer, preferably polar plastics. (Worschech '069 C2 L30-34 wherein the composition is used in the shaping of

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thermoplastic material and C9 L25-50 wherein the materials are added to the thermoplastic materials and then the plastic is shaped in any known manner) and (Worschech '069 C2 L55-60 wherein the composition is incorporated in the thermoplastic material).

The claim language “consisting essentially of: does not preclude the present of other additive components. See MPEP 2111.03

Absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, “consisting essentially of” will be construed as equivalent to “comprising.” See, e.g., *PPG*, 156 F.3d at 1355, 48 USPQ2d at 1355 (“PPG could have defined the scope of the phrase consisting essentially of” for purposes of its patent by making clear in its specification what it regarded as constituting a material change in the basic and novel characteristics of the invention.”). See also *AK Steel Corp. v. Sollac*, 344 F.3d 1234, 1240-41, 68 USPQ2d 1280, 1283-84 (Fed. Cir. 2003) (Applicant’s statement in the specification that “silicon contents in the coating metal should not exceed about 0.5% by weight” along with a discussion of the deleterious effects of silicon provided basis to conclude that silicon in excess of 0.5% by weight would materially alter the basic and novel properties of the invention. Thus, “consisting essentially of” as recited in the preamble was interpreted to permit no more than 0.5% by weight of silicon in the aluminum coating.); *In re Janakirama-Rao*, 317 F.2d 951, 954, 137 USPQ 893, 895-96 (CCPA 1963).

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Regarding Claims 4 and 5:

Modified Worschech '069 discloses the limitations set forth above which are incorporated herein.

Modified Worschech '069 discloses the components (a) to (b) mixed esters are present in a ratio by weight of 1:3 to 9:1 (i.e. 10:30 to 90:10) thus overlapping the claimed ratio range of 20:80 to 80:20 and 40:60 to 60:40. (C3 L20-22) See MPEP 2144.05(I): "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

Regarding Claim 8 and 25-26.

Modified Worschech '069 discloses the limitations set forth above which are incorporated herein. Worschech '069 also discloses the lubricant composition wherein component (b) comprises distearyl phthalate. (C7 L49-50).

Regarding Claims 14-15:

Modified Worschech '069 discloses the limitations set forth above which are incorporated herein. Worschech also discloses the use of natural fats and oils with iodine values below 10 as lubricants with internal and external lubricant properties for thermoplastics, preferably for polar plastics. (Worschech '069 C2 L30-34 wherein the composition is used in the shaping of thermoplastic material and C9 L25-50 where it is incorporated into the thermoplastic material) and (Worschech '069 C2 L55-60 wherein the composition is incorporated in the thermoplastic material)

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Regarding Claims 16, 17 and 18

Rejections to claims 1-5, 8 and 14 are expressly incorporated herein.

Modified Worschech '069 discloses the limitations set forth above which are incorporated herein. Modified Worschech also discloses the method for processing thermoplastics comprising the steps of incorporating into a thermoplastic polymer a lubricant composition comprising: (a) at least one natural fats or oils with iodine values below 10 and at least one lubricant different from the natural fat and/or oil of component (a) ('069 C3 L1-22 mixed esters) and processing the thermoplastic polymer, preferably polar plastics. (Worschech '069 C2 L30-34 wherein the composition is used in the shaping of thermoplastic material and C9 L25-50 wherein the materials are added to the thermoplastic materials and then the plastic is shaped in any known manner) and (Worschech '069 C2 L55-60 wherein the composition is incorporated in the thermoplastic material).

Regarding Claim 21:

Modified Worschech et al. '069 discloses the limitations above set forth. Worschech et al. '069 disclose the natural fat and oil in a mixture thereby meeting the limitation for fused together (Abstract). Worschech et al. '069 discloses the two components may be put together as solids or liquids, etc. meeting the limitation for fused together. (C8 L65-C9 L25 provides various embodiments wherein the two lubricants are combined and meet the limitation for "fused") "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the

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identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Regarding Claim 23:

Modified Worschech et al. '069 discloses the limitations above set forth.

Worschech et al. '069 discloses the lubricant composition is used in an amount of from 0.1 to 5 wt% incorporated into the thermoplastic material (C2 L55-61) falling within or alternatively overlapping the claimed range of from about 0.01 to about 10 parts by weight to 100 parts by weight of the thermoplastic polymer to be processed. See MPEP 2144.05(I): "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976)."

Regarding Claim 24:

Modified Worschech et al. '069 discloses the limitations above set forth.

Worschech et al. '069 discloses the lubricant is added to the thermoplastic material prior to effecting its shaping (C2 L60-63) and may be combined in the melt (C9 L3-5) (meeting the limitation of claim 24 (a).

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Worschech et al. (US 3,875,069) (referred to as '069) in view of Worschech et al. (4,637,887) (referred to as '887 as applied to claim 1 above, and further in view of Alastalo et al. (US 2005/0009957A1)

Regarding Claim 22:

Modified Worschech et al. '069 discloses the limitations above set forth.

Worschech et al. '069 disclose the two components of the lubricant can both be liquid (C8 L65-C9 L3). Worschech et al. '069 discloses the lubricant combinations can be subject to those shaping processes suitable for thermoplastic compounds and may be added to the thermoplastic materials before processing (C9 L25-45) and the shaping can be performed in any known manner (C9 L45-50).

Worschech et al. '069 does not expressly disclose the production taking place by means of spray crystallization.

Alastalo et al. discloses the process of production of propylene copolymers produced by spray crystallization (Abstract) and [0005].

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the composition in the method of Modified Worschech et al '069 in a thermoplastic polymerization process which includes spray crystallization as this is a known method of making polymers.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Worschech et al. (US 3,875,069) (referred to as '069) in view of Worschech et al. (4,637,887) (referred to as '887 as applied to claim 1 above, and further in view of Haack et al. (US 5,889,102)

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Regarding Claim 9.

Modified Worschech '069 discloses the limitations set forth above which are incorporated herein. Worschech also discloses the particularly suitable as mixed esters are those based on pentaerythrite and stearic acid. (C4 L19-20) (C6 L7 discloses dipentaerythrite)

Modified Worschech '069 does not expressly disclose the lubricant combinations wherein component (b) comprises pentaerythritol tetrastearate.

Haack et al. (US 5,889,102) discloses that pentaerythritol tetrastearate is a known lubricant for use in combination with other lubricants for use with plastics. (C1 L30-50)

It would have been obvious to a person having ordinary skill in the art at the time of invention to use the pentaerythritol tetrastearate of Haack as a lubricant component in Modified Worschech '069 as Haack discloses said lubricant is suitable for use in lubricant mixtures for use with plastics and Modified Worschech '069 already contemplates lubricant components of dipentaerythritol and stearic acid.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Worschech et al. (US 3,875,069) (referred to as '069) in view of Worschech et al. (4,637,887) (referred to as '887) as applied to claim 1 above, and further in view of Dohi et al. (US 2004/0014861A1)

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Regarding Claim 10.

Modified Worschech '069 discloses the limitations set forth above which are incorporated herein. Worschech also discloses the particularly suitable as mixed esters are those based on pentaerythrite and stearic acid. (C4 L19-20) (C6 L7 discloses dipentaerythrite)

Modified Worschech '069 does not expressly disclose the lubricant combinations wherein component (b) comprises dipentaerythritol hexastearate.

Dohi et al. (US 2004/0014861A1) discloses a material useful in the molding of polycarbonate material which uses dipentaerythritol hexastearate.

It would have been obvious to a person having ordinary skill in the art at the time of invention to use the dipentaerythritol hexastearate of Dohi et al. within the lubricant component in Modified Worschech '069 as Dohi et al. discloses said composition is suitable for use with plastics and Modified Worschech '069 already contemplates lubricant components of dipentaerythritol and stearic acid.

9. Claims 7 and 11-12, 19, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Worschech et al. (US 3,875,069) (referred to as '069) in view of Worschech et al. (4,637,887) (referred to as '887) as applied to claims 1 and 16 above, in view of Dohi et al. (US 2004/0014861A1) as applied to claim 10, in view of Haack et al. (US 5,889,102) as applied to claim 9 and further in view of Lindner (US 6,818,689).

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Regarding Claims 7 and 11-12, and 25-26

Modified Worschech '069 discloses the limitations set forth above which are incorporated herein. Worschech also discloses the lubricant may comprise stearic acid as the long chained aliphatic mono carboxylic acid lubricant component. (C6 L13) Worschech also discloses the use of natural fats (C6 L23) and esters of tallow fatty alcohol (C8 L22-24).

Modified Worschech '069 does not expressly disclose component (b) as comprising stearyl stearate or wherein the hydrogenated tallow is present as the natural fat and oil.

Lindner (US 6,818,689) discloses a lubricant composition for use in the processing of polyvinylchloride comprising an ester of a monofunctional organic acid and a monohydric alcohol wherein the ester is stearyl stearate. (C3 L38-44) Lindner also discloses the use of hydrogenated triglycerides as co-lubricants (C4 L42-46) such as hydrogenated tallow (C5 Table I L10)

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It would have been obvious to a person having ordinary skill in the art at the time of invention to try to use the stearyl stearate and the hydrogenated tallow (also meeting the limitations of claim 19) of Lindner in the lubricant composition of Worschech '069 as both are suitable for use with thermoplastics and are within the types of components already contemplated by Worschech '069. (I.e. stearic acid esters and esters of tallow fatty alcohol).

Regarding Claims 19:

Rejections to claims 1, 4 and 11- 13 are incorporated herein.

Modified Worschech '069 discloses the limitations set forth above which are incorporated herein.

Modified Worschech '069 discloses, the hydrogenated tallow as component (a) as set forth in rejections to claims 11-13 said rejections are expressly incorporated herein.

Modified Worschech also discloses the method for processing thermoplastics comprising the steps of incorporating into a thermoplastic polymer a lubricant composition comprising: (a) at least one natural fats or oils with iodine values below 10 and at least one lubricant different from the natural fat and/or oil of component (a) ('069 C3 L1-22 mixed esters) and processing the thermoplastic polymer, preferably polar plastics. (Worschech '069 C2 L30-34 wherein the composition is used in the shaping of thermoplastic material and C9 L25-50 wherein the materials are added to the thermoplastic materials and then the plastic is shaped in any known manner) and

(Worschech '069 C2 L55-60 wherein the composition is incorporated in the thermoplastic material).

Response to Arguments

10. Applicant's arguments filed 7/19/2011 have been fully considered but they are not persuasive for the reasons below set forth.

11. Applicant argues the lubricants for thermoplastics must be selected with care because certain properties of the finished PVC article can be influenced by the lubricants. The intended use of the composition for PVC thermoplastics does not further limit the composition claims and therefore does not overcome the rejections brought to the compositions under either Worschech'069 or Schnur as more fully above set forth. No PVC is claimed in the method. Nonetheless, Worschech '069 discloses the thermoplastic compounds include polymers, polycondensates, polyaddition products, chlorinated polymers such as polyvinyl chloride, polyvinylidene chloride and copolymers derived therefrom. (C9 L25-50) As such, the argument that the composition disclosed by the prior art is not suitable for use in PVC is not persuasive.

12. Applicant argues the new claim language of "consisting essentially of" precludes the application of the cited prior art which comprises additional additive components. However, the instant Specification indicates that additional additives are permissible such as antistatic agents, antifogging agents, antioxidants, UV stabilizers, coupling agents, lubricants, plasticizers, perfumes, etc. (P10 L12-16 and P11 L12-16)

MPEP 2111.03 The transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and ***those that do not materially affect the***

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basic and novel characteristic(s)” of the claimed invention. *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976) (emphasis added) (Prior art hydraulic fluid required a dispersant which appellants argued was excluded from claims limited to a functional fluid “consisting essentially of” certain components. In finding the claims did not exclude the prior art dispersant, the court noted that appellants’ specification indicated the claimed composition can contain any well-known additive such as a dispersant, and there was no evidence that the presence of a dispersant would materially affect the basic and novel characteristic of the claimed invention. The prior art composition had the same basic and novel characteristic (increased oxidation resistance) as well as additional enhanced detergent and dispersant characteristics.). “A consisting essentially of” claim occupies a middle ground between closed claims that are written in a consisting of’ format and fully open claims that are drafted in a comprising’ format.” *PPG Industries v. Guardian Industries*, 156 F.3d 1351, 1354, 48 USPQ2d 1351, 1353-54 (Fed. Cir. 1998). See also *Atlas Powder v. E.I. duPont de Nemours & Co.*, 750 F.2d 1569, 224 USPQ 409 (Fed. Cir. 1984); *In re Janakirama-Rao*, 317 F.2d 951, 137 USPQ 893 (CCPA 1963); *Water Technologies Corp. vs. Calco, Ltd.*, 850 F.2d 660, 7 USPQ2d 1097 (Fed. Cir. 1988).

The examiner maintains that the additional compositional components set forth in the cited references do not materially affect the claimed invention. If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of “consisting essentially of,” ***applicant has the burden of showing that the***

introduction of additional steps or components would materially change the characteristics of applicant's invention. *In re De Lajarte*, 337 F.2d 870, 143 USPQ 256 (CCPA 1964) (emphasis added) See also *Ex parte Hoffman*, 12 USPQ2d 1061, 1063-64 (Bd. Pat. App. & Inter. 1989) ("Although consisting essentially of' is typically used and defined in the context of compositions of matter, we find nothing intrinsically wrong with the use of such language as a modifier of method steps. . . [rendering] the claim open only for the inclusion of steps which do not materially affect the basic and novel characteristics of the claimed method. To determine the steps included versus excluded the claim must be read in light of the specification. . . . [I]t is an applicant's burden to establish that a step practiced in a prior art method is excluded from his claims by consisting essentially of' language.")

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAMELA HL WEISS whose telephone number is (571)270-7057. The examiner can normally be reached on Mon.-Thur. 8:30am-7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/pw/

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